



***Fire Season 2011: Smoke Talking Points***  
***USDA Forest Service, Southwestern Region***  
***June 3, 2011***

## **Background – Setting the Stage:**

- Drought conditions cover east and southeast Arizona, much of New Mexico, and west Texas. These conditions are expected to persist into July with drought developing across western and central Arizona as well as northwestern New Mexico.
- In terms of acres burned, the Southwest historically experiences its most active fire seasons in La Niña years following a strong El Niño year, as is currently the case.
- The Southwest Area experienced an active early fire season, due to multiple large, human-caused fires, primarily in southern Arizona and New Mexico. Additionally, Mexico's northern states have endured multiple large, human-caused wildfires that impacted air quality throughout southern Arizona, southern New Mexico, and west Texas.
- Several large wildfires in the Southwest have been burning for weeks. Most recently, fire activity has expanded northward and fires are now burning throughout the Southwest.
- These conditions are expected to intensify through June as the likelihood of lightning-caused fires increases. Smoke from large fires can impact communities for weeks.
- Smoke from individual fires can significantly affect the health of those living nearby, less so for communities further downwind. With multiple active wildfires throughout the Southwest, these impacts are compounded.
- Annual monsoonal moisture is expected to arrive in early July. As a result, we're likely to continue to see haze and smell smoke for the next month or more.

## **What is smoke and what are the concerns?**

- Wildfire smoke is a mixture of small particles, gases, and water vapor. The very small particles, commonly referred to as "*PM 2.5*" or "*fine particulate matter*," are the most harmful to health.
- Smoke exposure can temporarily cause burning eyes, runny nose, scratchy throat, headaches, and illness. However, these symptoms usually disappear soon after one leaves the smoke.
- Smoke can seriously affect individuals whose health is already compromised, especially those with respiratory or cardiovascular disease. Older adults and children are also high-risk groups.
  - For these individuals, it is best to limit exposure to smoke and to any sort of prolonged physical exertion when there are unhealthy levels of smoke outside. Individuals developing symptoms unresponsive to usual medications should see their health care providers immediately.
- When a specific wildfire produces smoke with potential to impact human health nearby, the Forest Service, along with federal and state partners as appropriate, monitors smoke impacts to help inform the public if unhealthy conditions exist.

- The New Mexico Environment Department and the Arizona Department of Environmental Quality are responsible for regulating pollutants under the Clean Air Act, including pollutants found in wildfire smoke. These state agencies ensure that air quality standards are met and maintained, issue permits, and enforce regulations.

**For more information on wildfires and what individuals can do if they are affected by smoke:**

- NM wildfire and smoke management information:  
[www.nmfireinfo.com](http://www.nmfireinfo.com)  
<http://www.nmenv.state.nm.us/aqb/Wildfire-PM.html>
- AZ wildfire and smoke management information:  
<http://wildlandfire.az.gov/>  
<http://www.azdeq.gov/environ/air/smoke/index.html>
- Health effects from smoke & protecting yourself:  
[http://www.nmenv.state.nm.us/aqb/documents/Smoke\\_FACTSHEET\\_Spring2011.pdf](http://www.nmenv.state.nm.us/aqb/documents/Smoke_FACTSHEET_Spring2011.pdf)  
[http://www.azdeq.gov/environ/air/smoke/download/fire\\_smoke\\_your\\_health\\_brochure.pdf](http://www.azdeq.gov/environ/air/smoke/download/fire_smoke_your_health_brochure.pdf)

**How to gauge health risks related to smoke from wildfires:**

- Forest Service data from smoke monitors near wildfires.  
<http://www.satguard.com/usfs/default.asp>. Click “*Real Time Data*” link.
- New Mexico Environment Department air quality monitors: <http://air.nmenv.state.nm.us/>  
Click on “*Monitoring Stations*” and select a monitor.
- Arizona Department of Environmental Quality air quality monitoring information:  
<http://www.azdeq.gov/environ/air/ozone/ensemble.pdf>
- In areas without air quality monitoring equipment, visibility can serve as a good substitute in determining air quality. The following chart includes guidelines for determining air quality based on visibility.

Visibility Category	Visibility in Miles
Good	10 miles or greater
Moderate	6 to 9 miles
Unhealthy for smoke-sensitive people	3 to 5 miles
Unhealthy	1½ to 2½ miles
Very unhealthy	1 to 1¼ miles
Hazardous	¾ mile or less